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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,806	04/13/2004	Jerome J. Ribo	118272	3472
25944	7590	08/06/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER BHAT, ADITYA S	
			ART UNIT 2863	PAPER NUMBER
			MAIL DATE 08/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/822,806

Applicant(s)

RIBO, JEROME J.

Examiner

Aditya S. Bhat

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5-7, 10, 12-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 12 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 10 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 10 & 13-18 is withdrawn in view of the newly discovered reference(s) Kim et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 10, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (USPUB 2005/0069071) in view of In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With regards to claim 1, Kim et al. (USPUB 2005/0069071) teaches a method of testing a clock and data recovery device (CDR), comprising:
producing test data from a first CDR;(100;Page 1, paragraph 0022) and
outputting the test data based on a clock; (116;fig 1)
generating data drift in the test data by changing a phase of the clock;(fig 2) setting the
phase of the clock based on a count value; (Page 3, paragraph 0039)
changing the count value across a range of phase shifts; (Page 3, paragraph 0039-0044)
incrementing/decrementing the count value until a maximum/minimum count value is

reached; (Page 6, paragraph 0073)

subsequently decrementing/incrementing the count value until a minimum/maximum count value is reached; (fig 8)

With regards to claim 10, Kim et al. (USPUB 2005/0069071) teaches a clock and data recovery device (CDR), comprising:

a phase variable clock source to generate a phase variable clock;(118;fig 1)

a test data generator to generate test data based on the phase variable clock;(110,120;fig 1)

a counter that has a count value to control a phase of the phase variable clock; (Page 5, paragraph 0065) and

a finite state machine to increment/decrement the count value until a maximum/minimum count value is reached, and subsequently decrement/increment the count value until a minimum/maximum count value is reached, (Page 6, paragraph 0073)

wherein the finite machine increments/decrements the count value until all the test data is generated. (Page 6, paragraph 0073)

With regards to claim 13, Kim et al. (USPUB 2005/0069071) teaches the test data generator is a pseudo random number generator. (Page 6, paragraph 0073) according to applicant's specification the pseudo random generator maybe a finite state machine.

With regards to claim 14, Kim et al. (USPUB 2005/0069071) teaches a the phase variable clock source is a phase rotator coupled to a phase locked loop (PLL) oscillator. (fig 1)

With regards to claim 15, Kim et al. (USPUB 2005/0069071) teaches a system or a network implementing the CDR of claim 10. (Page 1, paragraph 0017)

With regards to claim 16, Kim et al. (USPUB 2005/0069071) teaches a clock and data recovery device (CDR) to test a CDR, comprising:

means for generating test data to test the CDR; (100;Page 1, paragraph 0022)

means for producing a range of data drift conditions in the test data by changing a phase of a clock; (114,123; fig 1)

means for setting the phase of the clock based on a count value;(fig 7)

means for changing the count value across a range of phase shifts;(fig 9)

means for incrementing/decrementing the count value until a maximum/minimum count value is reached, and subsequently decrementing/incrementing the count value until a minimum/maximum count value is reached. (Page 6, paragraph 0073)

With regards to claim 17, Kim et al. (USPUB 2005/0069071) teaches a means for producing a range of data drift conditions include means for reducing a rate of data drift. (114;fig 1)

With regards to claim 18, Kim et al. (USPUB 2005/0069071) teaches a apparatus including a plurality of clock and data recovery devices, comprising:

a first CDR having a test data generator and a finite state machine to adjust data drift in the test data by setting a phase of a clock based on a count value; (Page 6, paragraph 0073) and

wherein the finite state machine increments/decrements the count value until a maximum/minimum count value is reached, and subsequently decrements/increments the count value until a minimum/maximum count value is reached, and wherein the finite machine increments/decrements the count value until all the test data is generated. (Page 6, paragraph 0073)

Kim et al. (USPUB 2005/0069071) discloses the claimed invention except for repeating the procedure for a second CDR based on test data from the first.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to repeat the procedure in a second CDR, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lesso (USPUB 2005/0220240) teaches a clock synchronizer and clock and data recovery apparatus and method, Hendrickson (USPUB 2002/0090045)

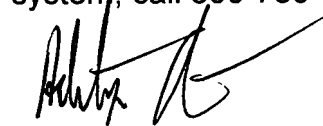
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teaches a digital clock recovery system and Carickhoff (USPN 4,456,890) teaches a data tracking clock recovery system using digitally controlled oscillator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S. Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Aditya Bhat
July 31, 2007